CLAIMS

1. **(Currently Amended)** A method for the production of thrombin from anticoagulated whole blood ~~for formation of a wound healing material~~, comprising:

    a) obtaining a volume of anticoagulated whole blood from a subject;

    b) mixing said anticoagulated whole blood with ethanol at room temperature;

    c) incubating the mixture of b) at room temperature for a time sufficient to produce a cellular and specific plasma component precipitate and a supernatant;

    d) separating the precipitate from the supernatant; and

    e) recovering the supernatant wherein said supernatant contains a thrombin preparation comprising 80-90% of prothrombin-thrombin proteins, no detectable fibrinogen and 20-30% of baseline levels of anti-thrombin III (ATIII).

2. **(Original)** The method of claim 1, wherein the volume of anticoagulated whole blood is between 8 to 10 ml.

3. **(Previously Presented)** The method of claim 1, wherein the whole blood is anticoagulated with an anticoagulant selected from the group consisting of acid citrate dextrose (ACD), ACD/mannitol, citrate phosphate dextrose (CPD), and ethylenediaminetetraacetic acid (EDTA).

4. **(Original)** The method of claim 3, wherein the whole blood is anticoagulated with acid-citrate-dextrose.

5. **(Original)** The method of claim 3, where the whole blood is anticoagulated with ACD/mannitol.

6. **(Original)** The method of claim 5, wherein the mannitol is present in a concentration of 7.5 mg/ml ACD.

7. **(Currently Amended)** The method of claim 1, wherein the mixing step with ethanol results in precipitation.~~precipitating agent is ethanol.~~

8. **(Original)** The method of claim 7, where said ethanol used is at a starting concentration of about 10% to 100%.

9. **(Original)** The method of claim 8, where said ethanol used is at a starting concentration of about 25% to 95%.

10. **(Original)** The method of claim 9, where said ethanol used is at a starting concentration of about 50% to 95%.

11. **(Currently Amended)** The method of claim 1, wherein calcium chloride is added with ethanol at the mixing step.~~the precipitating agent is a mixture of ethanol and calcium chloride.~~

12. **(Original)** The method of claim 1, wherein the incubation step requires less than 45 minutes.

13. **(Original)** The method of claim 1, wherein the incubation step requires less than 30 minutes.

14. **(Currently Amended)** The method of claim 1, wherein ~~the coagulant prepared~~ said thrombin is autologous.

15. **(Currently Amended)** The method of claim 1, wherein ~~the coagulant prepared~~ said thrombin is homologous.

16. **(Original)** The method of claim 1, wherein said separating step is accomplished by centrifuging the mixture.

17. **(Original)** The method of claim 1, wherein said separating step is accomplished by filtering the mixture.

18. **(Original)** The method of claim 1, wherein said separating step is accomplished by a combination of centrifugation and filtration of the mixture.

19. **(Cancelled)**.

20. **(Withdrawn)** A human blood fraction produced by the method of claim 1 comprising 80-90% of prothrombin-thrombin proteins, no detectable fibrinogen and 20-30% of baseline levels of ATIII, Protein C and Protein S.

21. (**Previously Presented**) The method of claim 22, wherein said blood derivative is chosen from the group consisting of a platelet concentrate (PC), platelet rich plasma (PRP), platelet poor plasma (PPP), purified fibrinogen or a mixture thereof to obtain a wound healing composition.

22. (**Previously Presented**) A method for the production of a wound healing material, consisting of:

a) obtaining a volume of anticoagulated whole blood from a subject;

b) mixing said anticoagulated whole blood with ethanol at room temperature;

c) incubating the mixture of b) at room temperature for a time sufficient to produce a cellular and specific plasma component precipitate and a supernatant;

d) separating the precipitate from the supernatant; and

e) recovering the supernatant wherein said supernatant contains thrombin; and

f) combining said supernatant with a blood derivative to form a wound healing material.